AMENDMENTS TO THE CLAIMS

LISTING OF CLAIMS

1. (currently amended) A semiconductor component comprising:

a stiffener, ~~comprising a metal sheet,~~ an adhesive layer on the stiffener, ~~metal sheet,~~ a circuit decal on the stiffener having only two layers including a plurality of conductors in physical contact with the adhesive layer having a plurality of contacts in an area array, and a polymer mask on the conductors having a plurality of openings aligned with the contacts;

a semiconductor die attached to the stiffener in electrical communication with the conductors; and

a plurality of terminal contacts on the ~~conductors~~ contacts and in the openings, the polymer mask configured as a solder mask for the terminal contacts and a support structure for the conductors.

~~electrically isolated by the polymer mask.~~

2. (currently amended) The semiconductor component of claim 1 wherein the stiffener and the component have a chip scale outline.

~~terminal contacts comprise balls or bumps in an area array.~~

3. (currently amended) The semiconductor component of claim ~~1~~ 2 wherein the stiffener and the component have a footprint of less than about 1.25X an outline of the die.

~~conductors comprise a plurality of contacts in an area array and the terminal contacts are formed on the contacts.~~

4. (currently amended) The semiconductor component of claim ~~1~~ 2 further comprising a die encapsulant on the

stiffener encapsulating the die and having the chip scale outline.

5. (currently amended) The semiconductor component of claim 1 wherein the polymer mask comprises a ~~solder mask~~ an imageable resist.

6. (previously presented) The semiconductor component of claim 1 wherein the stiffener comprises a metal selected from the group consisting of stainless steel, copper, nickel, titanium, aluminum, and alloys of these metals.

7. (currently amended) A semiconductor component comprising:

a stiffener;

a circuit decal attached to the stiffener comprising a plurality of conductors and an outer polymer mask on the conductors;

an electrically insulating adhesive layer in physical contact with the conductors attaching the circuit decal to the stiffener; ~~and~~

a semiconductor die attached to the stiffener in electrical communication with the conductors; and

a plurality of terminal contacts on the conductors;

the polymer mask configured as a solder mask for the terminal contacts, an outer electrically insulating layer for the conductors and the component, and a support structure for the circuit decal in place of a separate polymer substrate.

8. (currently amended) The semiconductor component of claim 7 wherein the terminal contacts comprise solder.

~~further comprising a plurality of terminal contacts on the conductors electrically isolated by the polymer mask.~~

9. (previously presented) The semiconductor component of claim 7 wherein the conductors comprise a plurality of contacts for the terminal contacts in an area array.

10. (previously presented) The semiconductor component of claim 7 further comprising a second semiconductor die attached to the stiffener.

11. (currently amended) A semiconductor component comprising:

a stiffener;

a semiconductor die attached to the stiffener;

a circuit decal attached to the stiffener comprising only two layers including a plurality of conductors and a polymer layer on the conductors comprising an imageable resist configured as a solder mask and a support structure for the conductors in place of a separate polymer substrate;

an electrically insulating adhesive layer in physical contact with the stiffener and the conductors, the adhesive layer attaching the circuit decal to the stiffener with the polymer layer forming an exterior surface of the component;

a plurality of interconnects electrically connecting the die and the conductors; and

a plurality of terminal contacts on the conductors electrically isolated by the polymer layer.

12. (currently amended) The semiconductor component of claim 11 wherein the stiffener and the component have a footprint about 1.25X an outline of the die.

~~comprises a metal.~~

13. (previously presented) The semiconductor component of claim 11 wherein the interconnects comprise wires bonded to the die and to the conductors.

14. (previously presented) The semiconductor component of claim 11 further comprising a die encapsulant on the stiffener encapsulating the die.

15. (previously presented) The semiconductor component of claim 11 further comprising an interconnect encapsulant on the stiffener encapsulating the interconnects.

16. (previously presented) The semiconductor component of claim 11 wherein the terminal contacts are arranged in an area array.

17. (previously presented) The semiconductor component of claim 11 wherein the stiffener includes a wire bonding opening, and the die includes a circuit die bonded to the stiffener, and a plurality of die contacts aligned with the wire bonding opening and wire bonded to the conductors.

18. (previously presented) The semiconductor component of claim 11 wherein the component comprises a ball grid array package.

19. (previously presented) The semiconductor component of claim 11 wherein the component comprises a multi chip module.

Claims 20-74 (canceled)

75. (currently amended) A system comprising:

a substrate; and

a semiconductor component on the substrate comprising a stiffener, ~~comprising a metal sheet,~~ an adhesive layer on

the ~~metal sheet~~ stiffener, a plurality of conductors in physical contact with the adhesive layer, and a polymer mask on the conductors comprising an imageable resist, a semiconductor die attached to the stiffener in electrical communication with the conductors, and a plurality of terminal contacts on the conductors;

the polymer mask configured as a solder mask for the terminal contacts, an outer electrically insulating layer for the conductors and the component, and a support structure for the circuit decal in place of a separate polymer substrate.

~~electrically isolated by the polymer mask.~~

76. (previously presented) The system of claim 75 wherein the substrate comprises a module substrate and the system comprises a multi chip module.

77. (previously presented) The system of claim 75 wherein the substrate is contained in a computer.

78. (previously presented) The system of claim 75 wherein the substrate is contained in a camcorder.

79. (previously presented) The system of claim 75 wherein the substrate is contained in a camera.

80. (previously presented) The system of claim 75 wherein the substrate is contained in a cell phone.

81. (currently amended) A system comprising:

a substrate comprising a plurality of electrodes; and

a semiconductor component on the substrate comprising:

a stiffener;

a semiconductor die attached to the stiffener, the stiffener and the component have a footprint of less than 1.25X an outline of the die;

a circuit decal attached to the stiffener comprising a plurality of conductors and a polymer layer on the conductors comprising an imageable resist configured to provide a solder mask and to support the conductors in place of a separate polymer substrate;

an electrically insulating adhesive layer in physical contact with the stiffener and the conductors, the adhesive layer attaching the circuit decal to the stiffener with the polymer layer forming an exterior surface of the component;

a plurality of interconnects electrically connecting the die and the conductors; and

a plurality of terminal contacts on the conductors electrically isolated by the polymer layer and bonded to the electrodes.

82. (previously presented) The system of claim 81 wherein the system comprises a multi chip module, a computer, a camcorder, a camera or a cell phone.

83. (previously presented) The system of claim 81 further comprising a plurality of dice on the stiffener.

84. (previously presented) The system of claim 81 further comprising a plurality of components on the substrate substantially identical to the component.

85. (previously presented) The system of claim 81 further comprising a plurality of components on the substrate substantially identical to the component but having a different electrical configuration.

86. (previously presented) The system of claim 81 wherein the polymer layer comprises a solder mask and the terminal contacts comprise solder bumps or balls.

87. (previously presented) The system of claim 81 further comprising a die encapsulant on the die.